

Title (en)
PUMP DISPENSERS

Title (de)
PUMPSPENDER

Title (fr)
DISTRIBUTEURS À POMPE

Publication
EP 3169444 A1 20170524 (EN)

Application
EP 15741586 A 20150714

Priority
• GB 201412508 A 20140714
• GB 201418585 A 20141020
• US 201562154172 P 20150429
• GB 2015052021 W 20150714

Abstract (en)
[origin: WO2016009187A1] A pump dispenser has a pump body and a reciprocable plunger with a lock-down mechanism, comprising internal or external lock formations of the plunger and body, such as thread formations, by which the plunger can be locked down for shipping and released subsequently by a rotational release movement. To supplement security for demanding shipping conditions the dispenser also has a supplementary catch mechanism in which respective catch formations (828,2123) of the plunger and body engage selectively in the locked-down position to inhibit the rotational release movement. The catch formations (828,2123) may have circumferentially-directed surfaces (832,2122) which engage between the underside of a plunger head having a shroud and a nozzle (211) and the top of the body (81) beneath the plunger head. They can be released by resilient deformation of one or more of the catch formations (828).

IPC 8 full level
B05B 11/00 (2006.01)

CPC (source: EP GB US)
B05B 11/0027 (2013.01 - EP US); **B05B 11/1001** (2023.01 - EP GB US); **B05B 11/1047** (2023.01 - EP US); **B05B 11/106** (2023.01 - EP GB US)

Citation (search report)
See references of WO 2016009187A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2016009187 A1 20160121; AU 2015288971 A1 20170209; CA 2954994 A1 20160121; CN 106794924 A 20170531;
CN 106794924 B 20210622; EP 3169444 A1 20170524; EP 3169444 B1 20210106; GB 201512298 D0 20150819; GB 2530613 A 20160330;
US 11446692 B2 20220920; US 2017128966 A1 20170511; US 2020206763 A1 20200702; US 2023182156 A1 20230615

DOCDB simple family (application)
GB 2015052021 W 20150714; AU 2015288971 A 20150714; CA 2954994 A 20150714; CN 201580048663 A 20150714;
EP 15741586 A 20150714; GB 201512298 A 20150714; US 201715405386 A 20170113; US 202016810968 A 20200306;
US 202217948504 A 20220920